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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/750,418      | 12/31/2003  | Martin Theriault     | Serie 6389          | 4643             |

7590 05/19/2005

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EXAMINER

O MALLEY, KATHRYN S

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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3749

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/750,418

Applicant(s)

THERIAULT, MARTIN

Examiner

Kathryn S. O'Malley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-20 is/are rejected.
- 7) ☒ Claim(s) 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/23/04, 10/12/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 9, 11, 12, 14, 15, and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 6,221,163 to Roberson, Jr. et al.

3. Regarding claims 1, 9, 15, and 19, Roberson, Jr. et al. teach a transportable (col. 1, ln. 17) apparatus and method of its use comprising cabinet 12 having an enclosed interior space (col. 4, ln. 15 and Figure 1a), a desiccator 20 to form a dry air stream (col. 4, ln. 33-35), means to receive a supply of compressed air (col. 4, ln. 18-20), and means to direct the dry gas stream from desiccator 20 to the interior of cabinet 12 to maintain a low humidity environment in the interior space (col. 5, ln. 18-28). Regarding claims 11 and 20, cabinet 12 is mounted to the base housing desiccator 20 (col. 4, ln. 15-17). It is deemed that the term "mounted" meets the claimed limitation of "integral" since it has been held that the term "integral" is sufficiently broad to embrace constructions united by such means as fastening and welding. *In re Hotte*, 177 USPQ 326, 328 (CCPA 1973). Regarding claim 12, flow control valve 21 varies the volume of the dry gas stream entering cabinet 12 (col. 4, ln. 45-49). Regarding claim 14, filter 42 removes particulates from the air stream (col. 5, ln. 3-6). Regarding claim 18, the humidity of the interior is maintained at 0.1% (col. 5, ln. 23-25).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 6-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberson, Jr et al. as applied to claims 1 and 15 above, and further in view of US Patent 6,615,908 to Boshier et al.

6. Regarding claims 2 and 10, Roberson, Jr. et al. teach a source of compressed nitrogen (col. 4, ln. 18-23) and supplying compressed nitrogen to desiccator 20 (col. 4, ln. 18-20), but Roberson, Jr. et al. does not teach generating the nitrogen. Boshier et al. teach a system and method of its use similar to that taught by Roberson, Jr. et al. comprising supplying nitrogen (col. 12, ln. 20) and utilizing desiccant elements (col. 13, ln. 65- col. 4, ln. 2) for controlling the humidity within a cabinet (col. 4, ln. 7-8; col. 12, ln. 1-2) that can be used to store "items requiring a controlled temperature" (col. 1, ln. 39-40). In addition to having these characteristics in common with the apparatus and method taught by Roberson, Jr. et al., Boshier et al. furthermore teach generating the nitrogen that is supplied to the cabinet (col. 13, ln. 27-34). Regarding claims 7 and 8, Boshier et al. teach utilizing either a hollow fiber membrane or pressure swing adsorption system nitrogen generator (col. 13, ln. 33-34). As Boshier et al. teach having a nitrogen generator in communication with a cabinet is an effective option to control the

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atmosphere of the cabinet (col. 13, ln. 27-34), it would have been obvious to one of ordinary skill in the art to modify the nitrogen supply of Roberson, Jr. et al. with the nitrogen generator of Boshier et al. Regarding claim 6, Boshier et al. do not teach a plurality of membranes. However, such a modification would have been obvious to one of ordinary skill in the art since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

7. Claims 3-5, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberson, Jr. et al. in view of Boshier et al., as applied to claims 2 and 15 above, and further in view of US Patent 5,439,507 to Barbe et al.

8. Boshier et al. are silent as to details about the membrane nitrogen generator (col. 13, ln. 33-34) used in their apparatus. Regarding claims 3, 16, and 17, Barbe et al. teach that a membrane nitrogen generator utilizes a membrane to separate air and form a dry nitrogen gas stream from a source of compressed gas (col. 3, ln. 3-22).

Regarding claims 4 and 5, Barbe et al. teach that a hollow fiber membrane nitrogen generator is generally formed from a polymeric material (col. 9, ln. 66-68). As Boshier et al. are silent as to details about the membrane nitrogen generator (col. 13, ln. 33-34) used in their apparatus, but Barbe et al. teach that the limitations of claims 3-5, 16, and 17 are typical characteristics of a hollow fiber membrane nitrogen generator, it would have been obvious to one of ordinary skill in the art to use a membrane nitrogen generator having the limitations taught by Barbe et al. as the membrane nitrogen generator taught by Boshier et al.

***Allowable Subject Matter***

9. Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathryn S. O'Malley whose telephone number is (571)272-4879. The examiner can normally be reached on M-F (9:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on (703)308-1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KSO

  
**CHERYL TYLER**  
**SUPERVISORY PATENT EXAMINER**